



UNITED STATES PATENT AND TRADEMARK OFFICE

CD

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,819	11/20/2003	Dmitry Potapov	50277-2294	3301

42425 7590 10/24/2006

HICKMAN PALERMO TRUONG & BECKER/ORACLE
2055 GATEWAY PLACE
SUITE 550
SAN JOSE, CA 95110-1089

EXAMINER

ROSE, HELENE ROBERTA

ART UNIT PAPER NUMBER

2163

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/719,819	Applicant(s) POTAPOV ET AL.	
	Examiner Helene Rose	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|--|

Art Unit: 2163

Detailed Action

1. In response to communications, Claims 1-37 is pending; Claims 1,4-6,11, and 34-37 have been amended; No claims have been cancelled, nor added.
2. Applicant's arguments, filed on 8/28/2006, with respect to claims 1-37 have been considered, but are not persuasive.

Claim Objections

3. In view of claims 4 and 36 being objected to because claims required a “ semi-colon” vs. “ comma” . Examiner withdraws the pending rejection based on applicant’ s amendments.

In view of claims 4 and 6 are objected to because claims had parentheses within claims. Examiner withdraws the pending rejection based on applicant’ s amendments.

Claim Rejections – 35 U.S.C – 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the

Art Unit: 2163

United States and was published under Article 21(2) of such treaty in the English language.

5, Claims 1-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Witkowski et al (US Patent No. 6,457,000, Date of Patent: September 24, 2002).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claim 1:

Regarding claim 1, Witkowski teaches a machine implemented method comprising:

accessing rows in a database table (column 2, lines 25-26, wherein accesses one or more previous rows of data, i.e., relative to a current row of data, Witkowski), wherein:

each row in the table corresponds to a dimension value combination (Figures 2 and 3, all features, Witkowski);

each row in the table is stored in a block; and

a location within a block at which each row is stored is determined based on the dimension value combination to which the row corresponds (column 6, lines 33-45, wherein the buffer may be created in various ways depending on the specific

Art Unit: 2163

implementations of the prior function and the location of the previous rows relative to the current row, when a single buffer is used, the size of the sliding window dictates the minimum size of the buffer, wherein for example, if the offset is 5, then the sliding window is 6, i.e. to hold the current row and the five prior rows, the buffer allocated to support the sliding window is large enough to hold the desired data from the six row and column 7, lines 38-40, wherein the offset parameter stores a value indicative of the sequential location of the desired previous rows of data relative to the current row of data, Witkowski); and

wherein the accessing of the rows also includes, in response to receiving a request for a row corresponding to a particular dimension value combination (column 11, lines 52-56, wherein the value returned by the function is used to calculate values requested by the client station as part of a query, once the values have been calculated they are inserted into specified columns of the current row and current row delivered to the client station, Witkowski), using the particular dimension value combination for calculating a value that represents the block that store the particular row (Figure 2, all features and columns 7-8, lines 63-67 and lines 1-14, wherein diagram 260 illustrates results generated for a query that accesses the first table, i.e. diagram 250, and makes use of the prior function, wherein diagram 260, includes a single column entitled c_sum, wherein c_sum of the second table indicates the sum of the sales receipt from the first day to the current value, wherein values for the c_sum column can be calculated, wherein access to row in the generation sequence that immediately precedes the current row and

retrieve the values in the c_sum column of the prior row, the retrieved value for c_sum is then added to the value of the sales column for the current row, Witkowski).

Claim 2:

Regarding claim 2, Witkowski teaches wherein the dimension value combination includes values for one or more dimensions (column, lines 6-21, wherein the size of the sliding window is using other parameters and counting variables in order to ensure that once the predetermined number of days have passed a new moving sum calculation is initiated, wherein value of sales column of the row corresponding to the first day of the week, the values of the moving sum column for days 2-7 of any given week is calculated by adding the value of the sales column in the current row to the value of the moving sum column from the previous row, once the value if the moving sum has been calculated for the current row, the current row may be transmitted to the client station and the next row in generation sequence may be established by current row, Witkowski), and the table does not include columns for storing values for the one or more dimensions (column 8, lines 26-35, wherein first column would store values corresponding to the day number, the second column would store values corresponding to the total receipts for the corresponding day, the third column would store values corresponding the cumulative sum over the selected days, that table would be order in ascending order based on the day so the values in the c_sum column can be interpreted, Witkowski).

Claim 3:

Regarding claim 3, Witkowski teaches wherein said table includes a plurality of segments, and wherein each segment stores rows for a contiguous range of dimension value combinations (Figure 3, all features and column 2, lines 25-26, column 11, lines 8-10, Witkowski).

Claim 4:

Regarding claim 4, Witkowski teaches creating an indexed organized table that includes an entry for each segment in the plurality of segments (column 11, lines 55-63, wherein inserted into specified columns of the current row is interpreted to be the entry and wherein if there are additional rows then control transfers to the control block where the sequence is repeated until all rows have been delivered, Witkowski), and the calculating of a value that represents the block that stores of the particular row is based in part on information contained in the entry that corresponds to the segment that contains the particular row (Figure 4, diagram S424, S426, S430, S432 and S434 and column 11, lines 25-56, wherein the Figure and diagrams are more defined, Witkowski).

Claim 5:

Regarding claim 5, Witkowski teaches wherein sizes of the plurality of segments (REFER to claim 3, wherein this limitation has already been addressed, Witkowski) and locations contained within the plurality of segments are allocated according to a density of discontinuities in ranges of dimension value combinations (column 5, lines 51-57, wherein 0 indicates previous row sequentially located zero rows prior to current row, value 1 indicates previous row is sequentially located 1 prior to the current row, and so

Art Unit: 2163

forth, wherein sequentially is interpreted to be one treatment after another and column 6, lines 43-45, wherein allocated to support the sliding window is defined, Witkowski).

Claim 6:

Regarding claim 6, Witkowski teaches accessing an indexed organized table (IOT) that includes an entry for each segment in the plurality of segments (REFER to claim 1, wherein accessing rows in a table and claim 4, wherein indexed organized table that includes an entry for each segment in plurality of segments have already been addressed, Witkowski); and the calculating of a value that represents the block that stores the particular row is based in part on information contained in the entry that corresponds to the segment that contains the particular row (REFER to claim 4, wherein this limitation has already been addressed, Witkowski).

Claim 7:

Regarding claim 7, Witkowski teaches wherein the index organized table includes non-key information used for determining locations of gaps in ranges of dimension value combinations that are between the segments (column 6, lines 61-67, wherein if the offset parameters used in the different PRIOR functions require access to rows that are far apart from each other then a first buffer is created to accommodate the first offset parameter and a second buffer is created to accommodate the second offset parameter, wherein separate pointers are the used to reference the two buffers, Witkowski).

Claim 8:

Regarding claim 8, Witkowski teaches wherein at least one of the plurality of segments includes more than one contiguous range of dimension value combinations column 5, lines 51–57, wherein 0 indicates previous row sequentially located zero rows prior to current row, value 1 indicates previous row is sequentially located 1 prior to the current row, and so forth, wherein sequentially is interpreted to be one treatment after another, Witkowski).

Claim 9:

Regarding claim 9, Witkowski teaches wherein at least one of the plurality of segments comprises at least two contiguous range of dimension value combinations that are joined together by at least one dummy entry in the table, therein forming one contiguous range of dimension value combinations (column 5, lines 51–57, wherein 0 indicates previous row sequentially located zero rows prior to current row, value 1 indicates previous row is sequentially located 1 prior to the current row, and so forth, ,wherein sequentially is interpreted to be one treatment after another, wherein the dummy is interpreted to be the 0, Witkowski).

Claim 10:

Regarding claim 10, Witkowski teaches wherein the at least two of the plurality of segments are each divided into blocks having a block size (column 8, lines 40–52, wherein c_sum , i.e. cumulative sum, $-PRIOR(c_sum, 3, 0) / 3$ as m_avg from table_1, wherein 3 is interpreted to be size, i.e. sliding window, Witkowski), and the block size of a first of the at least two of the plurality of segments is different from the block size of

Art Unit: 2163

a second of the at least two of the plurality of segments (Figure 4, diagram S426, wherein yes or no is defined according to range, and continues on to diagrams S428, S434, S436, and S438 to 3, wherein more rows is illustrated, Witkowski).

Claim 11:

Regarding claim 11, Witkowski teaches wherein the indexed organized table includes an identification of a reference location for each segment of the plurality of segments from which offsets from the reference location are calculated to reach other locations in each of the segments (column 6, lines 61-67, wherein if the offset parameters used in the different PRIOR functions require access to rows that are far apart from each other then a first buffer is created to accommodate the first offset parameter and a second buffer is created to accommodate the second offset parameter, wherein separate pointers are the used to reference the two buffers, Witkowski).

Claim 12:

Regarding claim 12, Witkowski teaches wherein each of the plurality of segments is divided into one or more blocks of equal size (column 8, lines 40-52, wherein c_sum , i.e. cumulative sum, $-PRIOR(c_sum, 3, 0) / 3$ as m_avg from table_1, wherein 3 is interpreted to be size, i.e. sliding window, Witkowski).

Claim 13:

Regarding claim 13, Witkowski teaches wherein the accessing of the location of interest is also performed by at least accessing a table having an identification of a dimension value of a reference location included in the block from which offsets are calculated to other locations (column 5, line 40, wherein the function is referenced using

Art Unit: 2163

the keyword PRIOR, lines 49-51, wherein offset parameter is used to specify an offset, relative to the current row of the previous row from which data is to be retrieved, lines 58-65, wherein default value parameter is used to indicate a value that will be returned if the offset parameter would cause us to access rows outside the available range, Witkowski).

Claim 14:

Regarding claim 14, Witkowski teaches wherein the reference location is an index value of a first of location within a segment that stores rows for a contiguous range of dimension value combinations (REFER to claim 3, wherein this limitation has already been addressed, Witkowski).

Claim 15:

Regarding claim 15, Witkowski teaches wherein the table having the identification is a B-tree index (column 8, line 34, wherein ascending order is defined, and wherein b-tree index is interpreted to be a type of index that uses a balanced tree structure for efficient record retrieval. B-tree indexes store key data in ascending or descending order, Witkowski).

Claim 16:

Regarding claim 16, Witkowski teaches wherein the table having the identification is a bit map index (column 10, lines 27-39, wherein lower bound on the problem of the prefix sum is $O(n/p)$, wherein this interpreted to be bitmap index, wherein it's normally used to index low cardinality columns in a warehouse environment, Witkowski).

Art Unit: 2163

Claim 17-33:

Regarding claims 17-33, Witkowski teaches a computer-readable medium carrying one or more sequences of instructions (column 2, lines 62-63, Witkowski), which when executed by one or more processors (column 4, lines 46-47, Witkowski), causes the one or more processors to perform (column 4, lines 48-60, see the example, Witkowski)

Claim 34:

Regarding claim 34, Witkowski computer-readable medium (Figure 1, all features, Witkowski) having stored therein at least:

a database table storing data on the computer readable media that corresponds to locations associated with at least one dimension value (Figure 2, all features, Witkowski); wherein the data items are stored in blocks of the table in an order dictated by the dimension values to which the data items correspond (Figure 2, diagrams 210, 252 and 254, Witkowski); and

wherein the table does not store values for the particular dimension (REFER to claim 2, wherein this limitation has already been addressed, Witkowski).

Claim 35:

Regarding claim 35, Witkowski computer-readable medium teaches wherein all of the locations of the table that have non-null values are organized into one or more segments, each segment including a contiguous region of data without discontinuities in the dimensions (column 5, lines 60-65, wherein the current row is the fifth row in the generation sequence of rows the offset parameter has a value of 6, then the previous

row specified by the offset parameter is undefined because it falls outside the addressable range of rows, wherein discontinuities is interpreted to be not defined, Witkowski).

Claim 36:

Regarding claim 36, Witkowski computer-readable medium teaches wherein the table has associated with it at least one dimension value combination that is associated with a null value, and that is not included in any of the one or more segments (column 6, lines 8-21, wherein previous rows retrieved would always be the row that immediately precedes the current row, wherein the default value would always be interpreted as 0, Witkowski).

Claim 37:

Regarding claim 37, Witkowski computer-readable medium teaches wherein the computer-readable medium system also has stored therein at least:

another table storing identifiers for determining the locations stored within each segment of the one or more segments (column 2, lines 53-58, wherein includes a default parameter that specifies a default value which will be returned if the offset parameter is determined to be outside a predetermined range of addressable rows in the generation sequence, Witkowski).

Prior Art of Record

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Examiners Response to Arguments

6. Applicant argues prior fail to teach, “*How data in the actual database tables are to be stored or accessed*”

Examiner respectfully disagrees. Applicant argues an amended claim language, in which database was not presently defined within the first set of original claims, therefore In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., database tables) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

However, Referring to column 1, lines 7-8, Witkowski teaches an apparatus and method for providing access to prior rows of data stored in the table, and lines 16-20, wherein structured query language (SQL), provides a user to create tables, in which SQL is know to be a standardized query language for requesting information from a database, that can be used to store various types of information, wherein the tables are generally organized in the form of rows and columns which is equivalent to how data in the database tables are to be stored, wherein it inheritance that the data is being placed and stored within the rows and columns of an table, wherein the table is a database table as defined by SQL; column 1, lines 20-25, also defines wherein SQL also provides a user with the ability to generate complex queries that can be used to retrieve specific information from the tables, wherein retrieve is equivalent to accessing, Witowski.

7. Applicant argues prior fail to teach, "*Accessing of rows in a database table wherein each row is stored in a block and wherein a location within a block at which each row is stored is determined based on dimension value combination*"

Examiner respectfully disagrees. Applicant argues an amended claim language, which was not presently defined within the initial office action, therefore In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., database table, each row stored in a block, and within a block) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

However, Referring to column 8, lines 4-6, Witkowski teaches wherein the SQL statement informs the server to access the row in the generation sequence that immediately precedes the current row and retrieve the value in the c_sum column of that prior row, which is interpreted/equivalent to accessing a row; Figure 2, diagram 260 illustrates wherein each row is stored in a block, in which c_sum, i.e. diagram 260 is c_sum [values], which values are locations [1-8], for instance, first block is [1]=\$500; column 8, lines 26-35, wherein the second column would store values corresponding to the total receipts, third column would store values corresponding to cumulative sum over the selected days, and the table would be ordered in ascending order based on the day so that the values in the c_sum can be interpreted, wherein this

is equivalent to location within a block at which each row is stored based on dimension value combination.

8. Applicant argues prior fail to teach, "*using a particular dimension value combination for calculating a value that represents the block that stores the particular row.*"

Examiner respectfully disagrees. Applicant argues an amended claim language, which was not presently defined within the initial office action, therefore In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a value that represents the block that stores) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

However, Referring to column 2, lines 47-51, Witkowski teaches wherein the statement may include various parameters that specify particular information regarding the previously generated row, wherein such parameter is an offset parameter that specifies a location in the generation sequence of the previously generated row, wherein location is defined/interpreted to be fined location, which is equivalent to a block; Figure 3, all features, wherein the first columns stores values corresponding to the number of days, the second column total the number of receipts corresponding to each day and stores, and third column totals the sum corresponding to the cumulative

sum over the selected days, which is interpreted to be calculating a value that represents the block that stores the particular row, wherein for instance day 2 (first column) total \$560, which is interpreted to be a value stored in block and calculated with $c_sum[1]$, i.e. \$500 (third column) to equal $c_sum[2] = \$1060$, in which the present total is stored in that present row.

9. Applicant argues prior fail to teach, "*plurality of segments*"

Examiner respectfully disagrees. Referring to column 10, lines 17-26, wherein first processor is responsible for the first n/p rows, the second processor is responsible for the next n/p rows, etc, wherein each processor i sends the prefix sum of its last row to each processor $i + 1, \dots, p$, wherein each processor i receives $i-1$ prefix sums that are sent to it, and each processor adds up all the $i - 1$ prefix sums that is has received, and adds the value of the prefix sum for each local row; column 13, lines 45-50, wherein segmenting data stored in the buffer into a first portion and second portion, each portions storing a useable previously generated row, which is equivalent to plurality of segments.

10. Applicant argues prior fail to teach, "*How a database system, in response to receiving a SQL query that requires inserting data into a table, actually stores the data in the database table*"

Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the

Art Unit: 2163

features upon which applicant relies (i.e., receiving a SQL query that requires inserting data into a table) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

11. Applicant argues prior fail to teach, “*database table storing data that corresponds to locations associated with at least one dimension value*”

Examiner respectfully disagrees. Referring to column 7, lines 1-3, Witkowski teaches wherein single buffer in this case where the buffer length would be the maximum of the two offsets in the two prior functions.

12. Applicant argues prior fail to teach, “*data items stored in blocks of the table in an order dictated by the data dimension values*”

Examiner respectfully disagrees. Applicant argues an amended claim language, which was not presently defined within the initial office action, therefore In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *data items stored in blocks of the table in an order dictated by the data dimension values*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

However, Referring to column 8, lines 4-6, Witkowski teaches wherein the SQL statement informs the server to access the row in the generation sequence that immediately precedes the current row and retrieve the value in the c_sum column of that prior row, which is interpreted/equivalent to accessing a row; Figure 2, diagram 260 illustrates wherein each row is stored in a block, in which c_sum, i.e. diagram 260 is c_sum [values], which values are locations [1-8], for instance, first block is [1]=\$500 and so forth, wherein values locations [1], and [2], and so forth are interpreted to be blocks of values; column 7, lines 1-3, Witkowski teaches wherein single buffer in this case where the buffer length would be the maximum of the two offsets in the two prior functions, wherein the prior functions are predefined; column 6, lines 22-23, wherein the prior function can be applied only on ordered data, which is equivalent to order dictated by the data dimension values, in which buffer length describes an dimension..

13. Applicant argues prior fail to teach, "*organizing locations of the table that have non null values*"

Examiner respectfully disagrees. Referring to column 5, line 45, Witkowski teaches wherein PRIOR function consist of (column, offset, default value), in which offset is interpreted to be an location to a value added to a base address to produce a second address and default value is interpreted to be a value that is used when no value is provided in the instance document, wherein default values apply to attributes that are either empty or missing in the instance documents and that apply to empty elements, as defined in column 6, line 8, the default value is 0, which is equivalent to non-null

Art Unit: 2163

values; column 5, lines 51-53, wherein a value of 0 indicates that the previous row is sequentially located zero rows prior to current row.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Point of Contact

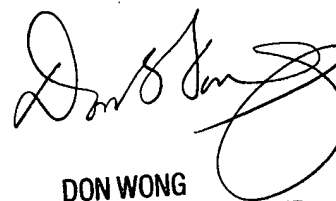
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Rose whose telephone number is (571) 272-0749. The examiner can normally be reached on 8:00am - 4:30pm Monday-Friday.

Art Unit: 2163

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helene Rose
Technology Center 2100
October 16, 2006



DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100